



SEQUENCE LISTING

<110> COUKOS, George  
CONEJO-GARCIA, Jose R

<120> IMMUNE CELL RECEPTOR LIGAND AND IMMUNE CELL RECEPTOR

<130> 555-88

<140> 10/525,643

<141> 2005-02-25

<150> PCT/US03/27488

<151> 2003-09-04

<150> 60/408,397

<151> 2002-09-04

<150> 60/478,371

<151> 2003-06-13

<160> 21

<170> PatentIn Ver. 2.1

<210> 1

<211> 148

<212> DNA

<213> Artificial Sequence

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<223> Description of Artificial Sequence:human ligand for NKG2D receptor

<400> 1

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<210> 2

<211> 257

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:human ligand for NKG2D receptor

<400> 2

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gtgaagcgca ggtcttcttg aataaaaatc ttttccttca gtacaacagt gacaacaaca 120
tgggtcaaacc tctgggcctc ctggggaaga aggtatatgc caccagcact tggggagaat 180
tgacccaaac gctggggagaa gtggggcgag acctcaggat gtccttttgt gacatcaaac 240
cccagataaa gaccagt                                             257
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<210> 3  
<211> 276  
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<213> Artificial Sequence

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<223> Description of Artificial Sequence:human ligand for NKG2D receptor

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gcaccttggc agttcgccac caatggagag aaatccctcc tctttgacgc aatgaacatg 120  
acctggacag taattaatca tgaagccagt aagatcaagg agacatggaa gaaagacaga 180  
gggctggaaa agtattttcag gaagctctca aagggagact gcgatcactg gctcagggaa 240  
ttcttagggc actgggaggc aatgccagaa ccgaca 276

<210> 4  
<211> 204  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:human ligand for NKG2D receptor

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atcatcctgg gggcattcat cctgttagtt ttaatgggaa ttgttctcat ctgtgtctgg 120  
tggcaaaaatg gtgagtggca ggctgggtctc tggcccttga ggacgtctta gtctggtaag 180  
gactcaagag aggtgaatca tggg 204

<210> 5  
<211> 244  
<212> PRT  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:ULBP1

<400> 5  
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His Leu Leu Ser Gly Trp Ser Arg Ala Gly Trp Val Asp Thr His Cys  
20 25 30  
Leu Cys Tyr Asp Phe Ile Ile Thr Pro Lys Ser Arg Pro Glu Pro Gln  
35 40 45  
Trp Cys Glu Val Gln Gly Leu Val Asp Glu Arg Pro Phe Leu His Tyr  
50 55 60  
Asp Cys Val Asn His Lys Ala Lys Ala Phe Ala Ser Leu Gly Lys Lys  
65 70 75 80  
Val Asn Val Thr Lys Thr Trp Glu Glu Gln Thr Glu Thr Leu Arg Asp

85					90					95					
Val	Val	Asp	Phe	Leu	Lys	Gly	Gln	Leu	Leu	Asp	Ile	Gln	Val	Glu	Asn
		100						105					110		
Leu	Ile	Pro	Ile	Glu	Pro	Leu	Thr	Leu	Gln	Ala	Arg	Met	Ser	Cys	Glu
		115					120					125			
His	Glu	Ala	His	Gly	His	Gly	Arg	Gly	Ser	Trp	Gln	Phe	Leu	Phe	Asn
	130					135					140				
Gly	Gln	Lys	Phe	Leu	Leu	Phe	Asp	Ser	Asn	Asn	Arg	Lys	Trp	Thr	Ala
145					150					155					160
Leu	His	Pro	Gly	Ala	Lys	Lys	Met	Thr	Glu	Lys	Trp	Glu	Lys	Asn	Arg
			165						170					175	
Asp	Val	Thr	Met	Phe	Phe	Gln	Lys	Ile	Ser	Leu	Gly	Asp	Cys	Lys	Met
			180					185					190		
Trp	Leu	Glu	Glu	Phe	Leu	Met	Tyr	Trp	Glu	Gln	Met	Leu	Asp	Pro	Thr
		195					200					205			
Lys	Pro	Pro	Ser	Leu	Ala	Pro	Gly	Thr	Thr	Gln	Pro	Lys	Ala	Met	Ala
	210					215					220				
Thr	Thr	Leu	Ser	Pro	Trp	Ser	Leu	Leu	Ile	Ile	Phe	Leu	Cys	Phe	Ile
225					230					235					240
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<210> 6

<211> 246

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:ULBP2

<400> 6

Met	Ala	Ala	Ala	Ala	Ala	Thr	Lys	Ile	Leu	Leu	Cys	Leu	Pro	Leu	Leu
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Leu	Leu	Leu	Ser	Gly	Trp	Ser	Arg	Ala	Gly	Arg	Ala	Asp	Pro	His	Ser
			20					25					30		

Leu	Cys	Tyr	Asp	Ile	Thr	Val	Ile	Pro	Lys	Phe	Arg	Pro	Gly	Pro	Arg
		35					40					45			

Trp	Cys	Ala	Val	Gln	Gly	Gln	Val	Asp	Glu	Lys	Thr	Phe	Leu	His	Tyr
50						55					60				

Asp	Cys	Gly	Asn	Lys	Thr	Val	Thr	Pro	Val	Ser	Pro	Leu	Gly	Lys	Lys
65					70					75					80





Asn Ser Asp Asn Asn Met Val Lys Pro Leu Gly Leu Leu Gly Lys Lys  
 65 70 75 80  
 Val Tyr Ala Thr Ser Thr Trp Gly Glu Leu Thr Gln Thr Leu Gly Glu  
 85 90 95  
 Val Gly Arg Asp Leu Arg Met Leu Leu Cys Asp Ile Lys Pro Gln Ile  
 100 105 110  
 Lys Thr Ser Asp Pro Ser Thr Leu Gln Val Glu Met Phe Cys Gln Arg  
 115 120 125  
 Glu Ala Glu Arg Cys Thr Gly Ala Ser Trp Gln Phe Ala Thr Asn Gly  
 130 135 140  
 Glu Lys Ser Leu Leu Phe Asp Ala Met Asn Met Thr Trp Thr Val Ile  
 145 150 155 160  
 Asn His Glu Ala Ser Lys Ile Lys Glu Thr Trp Lys Lys Asp Arg Gly  
 165 170 175  
 Leu Glu Lys Tyr Phe Arg Lys Leu Ser Lys Gly Asp Cys Asp His Trp  
 180 185 190  
 Leu Arg Glu Phe Leu Gly His Trp Glu Ala Met Pro Glu Pro Thr Val  
 195 200 205  
 Ser Pro Val Asn Ala Ser Asp Ile His Trp Ser Ser Ser Ser Leu Pro  
 210 215 220  
 Asp Arg Trp Ile Ile Leu Gly Ala Phe Ile Leu Leu Val Leu Met Gly  
 225 230 235 240  
 Ile Val Leu Ile Cys Val Trp Trp Gln Asn Gly Glu Trp Gln Ala Gly  
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 Leu Trp Pro Leu Arg Thr Ser  
 260

<210> 9

<211> 710

<212> DNA

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:cDNA sequence of immune cell receptor  
LCCR

<400> 9

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 aatgtctgaa gaagtacttt atgcagatct tcaattccag aactccagtg agatggaaaa 120  
 aatcccagaa attggcaaat ttggggaaaa agcacctcca gctccctctc atgtatggcg 180  
 tccagcagcc ttgtttctga ctcttctgtg ccttctgttg ctcatgggat tgggagtcct 240  
 ggcaagcatg ttccacgtaa ctttgaagat agaaatgaaa aaaatgaaca aactacaaaa 300  
 catcagttaa gagctccaga gaaatatttc tctacaactg atgagtaaca tgaatatctc 360  
 caacaagatc aggaacctct ccaccacact gcaacaata gccaccaaata tatgtcgtga 420

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gctatatagc aaagaacaag agcacaaatg taagccttgt ccaaggagat ggatttggca 480
taaggacagc tggtatttcc taagtgatga tgtccaaaca tggcaggaga gtaaaatggc 540
ctgtgctgct cagaatgcc a gcctgttgaa gataaacaac aaaaatgcat tggaatttat 600
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<210> 10

<211> 231

<212> PRT

<213> Artificial Sequence

<220>

<223> Description of Artificial Sequence:Immune LCCR cell receptor

<400> 10

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Met Cys Phe Tyr Glu Asn Tyr Ala Glu Ile Asp Phe Phe Thr Tyr Ser
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Ser Met Ser Glu Glu Val Thr Tyr Ala Asp Leu Gln Phe Gln Asn Ser
          20             25             30

Ser Glu Met Glu Lys Ile Pro Glu Ile Gly Lys Phe Gly Glu Lys Ala
      35             40             45

Pro Pro Ala Pro Ser His Val Trp Arg Pro Ala Ala Leu Phe Leu Thr
      50             55             60

Leu Leu Cys Leu Leu Leu Leu Ile Gly Leu Gly Val Leu Ala Ser Met
 65             70             75             80

Phe His Val Thr Leu Lys Ile Glu Met Lys Lys Met Asn Lys Leu Gln
          85             90             95

Asn Ile Ser Glu Glu Leu Gln Arg Asn Ile Ser Leu Gln Leu Met Ser
      100             105             110

Asn Met Asn Ile Ser Asn Lys Ile Arg Asn Leu Ser Thr Thr Leu Gln
      115             120             125

Thr Ile Ala Thr Lys Leu Cys Arg Glu Leu Tyr Ser Lys Glu Gln Glu
      130             135             140

His Lys Cys Lys Pro Cys Pro Arg Arg Trp Ile Trp His Lys Asp Ser
      145             150             155             160

Cys Tyr Phe Leu Ser Asp Asp Val Gln Thr Trp Gln Glu Ser Lys Met
          165             170             175

Ala Cys Ala Ala Gln Asn Ala Ser Leu Leu Lys Ile Asn Asn Lys Asn
      180             185             190

Ala Leu Glu Phe Ile Lys Ser Gln Ser Arg Ser Tyr Asp Tyr Trp Leu
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Gly Leu Ser Pro Glu Glu Asp Ser Thr Arg Gly Met Arg Val Asp Asn
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Ile Ile Asn Ser Ser Ala Trp  
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<210> 11  
<211> 21  
<212> DNA  
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<220>  
<223> Description of Artificial Sequence:Primer

<400> 11  
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<210> 12  
<211> 22  
<212> DNA  
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<220>  
<223> Description of Artificial Sequence:Primer

<400> 12  
cccatgattc acctctcttg ag 22

<210> 13  
<211> 23  
<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:Primer

<400> 13  
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<210> 14  
<211> 23  
<212> DNA  
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<220>  
<223> Description of Artificial Sequence:Primer

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<210> 15  
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<213> Artificial Sequence



<220>  
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 <210> 18  
 <211> 25  
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 <223> Description of Artificial Sequence:Primer  
  
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<211> 23  
<212> DNA  
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<220>  
<223> Description of Artificial Sequence:Primer

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<210> 21  
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<212> DNA  
<213> Artificial Sequence

<220>  
<223> Description of Artificial Sequence:human ligand for NKG2D receptor

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ctaatagcct tggagatcat ggttggtggt cactctcttt gcttcaactt cactataaaa 180  
tcattgtcca gacctggaca gccctggtgt gaagcgcagg tcttcttgaa taaaaatctt 240  
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